

CLAIMS

1. A lighting device comprising:
 - a light guide plate in the shape of a flat plate;
 - a light source unit disposed on the side of the light guide plate; and
 - a polarization separation element disposed between the light guide plate and the light source unit, for transmitting linearly polarized light in a first polarized direction and reflecting linearly polarized light in a polarized direction normal to the first polarized direction.
2. A lighting device according to claim 1, comprising
 - a phase modulation element disposed between the light source unit and the polarization separation element.
3. A lighting device according to claim 1 or 2, wherein
 - the light source unit includes an light emission source, and a reflecting member for reflecting light from the light emission source.
4. A lighting device according to claim 3, wherein
 - the light emission source is a linear light emission source, and
 - the reflecting member is disposed surrounding the

linear light emission source.

5. A lighting device according to claim 3, wherein the light source unit includes a light guide, the light emission source is a spot light emission source, and the spot light emission source is disposed on the end surface of the pillar-shaped light guide, and light exits the pillar-shaped light guide at a first side surface, and the reflecting member is disposed on a second side surface opposed to the first side surface.

6. A lighting device according to claim 5, wherein the second side surface is a prism surface.

7. A lighting device comprising:
a light guide plate in the shape of a flat plate;
a light source unit disposed on the side of the light guide plate; and
a phase modulation element disposed between the light guide plate and the light source unit.

8. A lighting device according to claim 7, wherein the light source unit includes a spot light emission source and a pillar-shaped light guide, and the spot light emission source is disposed on the end surface of the pillar-shaped light guide, and light exits the pillar-shaped light guide at a first side surface.

9. A lighting device according to claim 8, wherein the second side surface opposed to the first side

surface is a prism surface.

10. A liquid crystal display device comprising:

a liquid crystal panel;

a lighting device including a light guide plate in the shape of a flat plate, a light source unit disposed on the side of the light guide plate, and a polarization separation element disposed between the light guide plate and the light source unit, for transmitting linearly polarized light in a first polarized direction and reflecting linearly polarized light in a polarized direction normal to the first polarized direction.

11. A liquid crystal display device according to claim 10, comprising

a first phase modulation element disposed between the light source unit and the polarization separation element.

12. A liquid crystal display device according to claim 10 or 11, comprising

a second phase modulation element disposed between the liquid crystal panel and the lighting device.